# LISTING OF THE CLAIMS

1. (Previously Presented) A process for producing a particulate support for an olefin polymerization catalyst having an average particle size distribution between 1 to 500  $\mu m$ , the process comprising,

adding a solution of a magnesium compound of a formula (I):

Mg (OR2) 
$$_{2\text{-}n\text{-}x}$$
 (R1)  $_{n}\text{X}_{x}$ 

(I)

wherein each  $R_1$  and  $R_2$  independently represent a  $C_{3-10}$  hydrocarbyl group; X is a halogen;  $0 \le n < 2$  and may or may not be an integer; x < 2 and may or may not be an integer; the sum of (2-n), n, and x is 2 to a solution of a halogen-containing aluminum compound selected from the group consisting of dimethyl aluminium chloride, diethyl aluminium chloride, methyl aluminium dichloride and ethyl aluminium dichloride, to obtain a solid reaction product in a liquid reaction medium;

recovering the solid reaction product by separating the solid reaction product from the liquid reaction medium; and

washing the solid reaction product with a wash solution until the molar ratio of aluminum to magnesium has a value of at least 0.3.

### 2. (Cancelled)

3. (Previously Presented) The process according to claim 1, wherein the molar ratio of aluminum to magnesium has a value of  $0.4 \le \text{aluminum:magnesium} \le 1.1$ .

#### 4. (Cancelled)

5. (Previously Presented) The process according to Claim 1, wherein the wash solution is an inert linear or branched aliphatic, alicyclic or aromatic  $C_{5-20}$  hydrocarbon or any mixtures thereof.

### 6. - 9. (Cancelled)

10. (Previously Presented) The process according to claim 1, wherein the magnesium compound is of formula (I):

$$Mg(OR_2)_{2-n}(R_1)_n$$
 (I),

wherein each  $R_1$  and  $R_2$  independently represents a  $C_{3-10}$  hydrocarbyl group; and  $0 \le n < 2$  and may or may not be an integer.

- 11. (Previously Presented) The process according to Claim 1 , wherein the solution of the magnesium compound (I) is a reaction mixture prepared by contacting in an inert hydrocarbon solvent or any mixtures thereof (a) a magnesium alkyl of formula  $Mg(R_1)_2$  (III), wherein each  $R_1$  independently represents a  $C_{3-10}$  hydrocarbyl group, with (b) an alcohol of formula  $R_2OH$ , wherein  $R_2$  represents a  $C_{3-10}$  hydrocarbyl group.
- 12. (Previously Presented) The process according to claim 11, wherein the magnesium alkyl compound (III) is butyloctylmagnesium.
- 13. (Previously Presented) The process according to claim 11, wherein the alcohol  $R_2OH$  is 2-ethyl-1-hexanol.
- 14. (Previously Presented) The process according to claim 12, wherein butyloctylmagnesium in an inert hydrocarbon solvent or any mixtures thereof is contacted with 2-ethyl-1-hexanol and the

obtained solution is added to a solution of ethyl aluminum dichloride in an inert hydrocarbon solvent or any mixtures thereof to form a solid reaction product.

15. (Previously Presented) A solid catalyst support for an olefin polymerization catalyst obtained by the method of claim 1.

- 17. (Previously Presented) A solid catalyst support for an olefin polymerization catalyst comprising a separated and/or washed solid reaction product of (a) a magnesium compound of formula (I) and (b) a halogen-containing aluminium compound selected from the group consisting of dimethyl aluminium chloride, diethyl aluminium chloride, methyl aluminium dichloride and ethyl aluminium dichloride, wherein the molar ratio of aluminum to magnesium in said support is  $\geq 0.3$ .
- 18. (Previously Presented) A solid catalyst support according to claim 17, which comprises a separated and/or washed solid reaction product of (a) a reaction mixture of a solution of magnesium alkyl of formula  $Mg(R_1)_2$  (III), wherein each  $R_1$

independently represents a  $C_{3-10}$  hydrocarbyl group, with an alcohol of formula  $R_2OH$ , wherein  $R_2$  represents a  $C_{3-10}$  hydrocarbyl group, in an inert hydrocarbon solvent or any mixtures thereof; and (b) a solution of a halogen-containing aluminium compound selected from the group consisting of dimethyl aluminium chloride, diethyl aluminium chloride, methyl aluminium dichloride and ethyl aluminium dichloride in an inert hydrocarbon solvent or any mixtures thereof.

- 19. (Previously Presented) The solid catalyst support according to claim 18, wherein the molar ratio of Al:Mg in said support is  $\geq 0.4$ .
- 20. (Previously Presented) The solid support according to claim 18, wherein in the alcohol of formula  $R_2OH$ ,  $R_2$  is a  $C_{3-10}$  cycloalkyl or branched or unbranched  $C_{3-10}$  alkyl.
- 21. (Previously Presented) A process for producing a Ziegler-Natta catalyst component for olefin polymerization comprising treating, in an inert solvent, the solid catalyst support according to claim 15, with a transition metal compound of Group 4 to 6 of the Periodic Table (IUPAC).

- 22. (Previously Presented) The process according to claim 21, wherein the transition metal compound is a tetravalent titanium compound.
- 23. (Previously Presented) The process according to claim 22, wherein the transition metal compound is titanium tetrachloride (TiCl<sub>4</sub>).
- 24. (Previously presented) The process according to claim 23, wherein  ${\rm TiCl_4}$  is used in a molar ratio of 1-0.5 mol to one mol of Mg present in the support.
- 25. (Previously Presented) A process for (co)polymerizing an olefin, wherein the catalyst component produced according to claim 21 is contacted with the olefin.
- 26. (Previously Presented) The process of claim 1, wherein the molar ratio of aluminum to magnesium in the obtained reaction product material has a value of at least 0.4.
- 27. (Previously Presented) The process of claim 3, wherein the molar ratio of aluminum to magnesium in the obtained reaction product material has a value of  $0.6 \le \text{aluminum:magnesium} \le 0.99$ .

- 29. (Previously Presented) The process of Claim 26, wherein the wash solution is an inert linear or branched aliphatic, alicyclic or aromatic C<sub>5-20</sub> hydrocarbon or any mixtures thereof.
- 30. (Previously Presented) The process of claim 5, wherein the washing step is carried out at a temperature between 40 to 80°C.
- 31. (Previously Presented) The process of claim 29, wherein the washing step is carried out at a temperature between 40 to 80°C.
- 32. (Previously Presented) The process of claim 10, wherein the solution of the magnesium hydrocarbyloxy compound (I) is a reaction mixture prepared by contacting in an inert hydrocarbon solvent or any mixtures thereof (a) a magnesium alkyl of formula  $Mg(R_1)_2$  (III), wherein each  $R_1$  independently represents a  $C_{3-10}$  hydrocarbyl group, with (b) an alcohol of formula  $R_2OH$ , wherein  $R_2$  represents a  $C_{3-10}$  hydrocarbyl group.
- 33. (Previously Presented) The process of claim 32, wherein the magnesium alkyl compound (III) is butyloctylmagnesium.

- 34. (Previously Presented) The process of claim 12, wherein the alcohol R<sub>2</sub>OH is 2-ethyl-1-hexanol.
- 35. (Previously Presented) The process of claim 32, wherein the alcohol R<sub>2</sub>OH is 2-ethyl-1-hexanol.
- 36. (Previously Presented) The process of claim 33, wherein the alcohol R<sub>2</sub>OH is 2-ethyl-1-hexanol.
- 37. (Previously Presented) The process according to claim 33, wherein butyloctylmagnesium in an inert hydrocarbon solvent or any mixtures thereof is contacted with 2-ethyl-1-hexanol and the obtained solution is added to a solution of ethyl aluminum dichloride in an inert hydrocarbon solvent or any mixtures thereof to form a solid reaction product.
- 38. (Previously Presented) The process of claim 11, wherein  $R_1$  is a  $C_{3-10}$  cycloalkyl or a branched or unbranched  $C_{3-10}$  alkyl.
- 39. (Previously Presented) The process of claim 32, wherein  $R_1$  is a  $C_{3-10}$  cycloalkyl or a branched or unbranched  $C_{3-10}$  alkyl.

40. (Previously Presented) A solid catalyst support for an olefin polymerization catalyst obtained by the method of claim 26.

- 42. (Previously Presented) The solid catalyst support of claim 17, wherein the molar ratio of aluminum to magnesium in said support is  $\geq$  0.4.
- 43. (Previously Presented) The solid catalyst support of claim 17, wherein the separated and/or washed solid reaction product further comprises an electron donor.
- 44. (Previously Presented) The solid catalyst support of claim 42, wherein the separated and/or washed solid reaction product further comprises an electron donor.
- 45. (Previously Presented) A solid catalyst support according to claim 42, which comprises a separated and/or washed solid reaction product of (a) a reaction mixture of a solution of magnesium alkyl of formula  $Mg(R_1)_2$  (III), wherein each  $R_1$  independently represents a  $C_{3-10}$  hydrocarbyl group, with an

alcohol of formula  $R_2OH$ , wherein  $R_2$  represents a  $C_{3-10}$  hydrocarbyl group, in an inert hydrocarbon solvent or any mixtures thereof; and (b) a solution of a halogen-containing aluminum compound selected from the group consisting of dimethyl aluminum chloride, diethyl aluminum chloride, methyl aluminum dichloride and ethyl aluminum dichloride in an inert hydrocarbon solvent or any mixtures thereof.

46. (Previously Presented) A solid catalyst support of claim 18, wherein the molar ratio of Al:Mg in said support is  $0.6 \le \text{Al:Mg} \le 0.99$ .

- 48. (Previously Presented) A solid catalyst support of claim 45, wherein the molar ratio of Al:Mg in said support is  $0.6 \le \text{Al:Mg} \le 0.99$ .
- 49. (Previously Presented) The solid support according to claim 19, wherein in the alcohol of formula  $R_2OH$ , where  $R_2$  is a  $C_{3-10}$  cycloalkyl or branched or unbranched  $C_{3-10}$  alkyl.

- 50. (Previously Presented) The solid support according to claim 46, wherein in the alcohol of formula  $R_2OH$ , where  $R_2$  is a  $C_{3-10}$  cycloalkyl or branched or unbranched  $C_{3-10}$  alkyl.
- 51. (Previously Presented) The solid support according to claim 45, wherein in the alcohol of formula  $R_2OH$ , where  $R_2$  is a  $C_{3-10}$  cycloalkyl or branched or unbranched  $C_{3-10}$  alkyl.
- 52. (Previously Presented) The process of claim 21 further comprising treating the solid catalyst support with an electron donor.
- 53. (Previously Presented) The process of claim 52 further comprising recovering the catalyst component.
- 54. (Previously Presented) The process according to claim 52, wherein the transition metal compound is a tetravalent titanium compound.
- 55. (Previously Presented) The process according to claim 53, wherein the transition metal compound is a tetravalent titanium compound.

- 56. (Previously Presented) A process for (co)polymerizing an olefin, wherein the catalyst component produced according to claim 52 is contacted with the olefin.
- 57. (Previously Presented) A process for (co)polymerizing an olefin, wherein the catalyst component produced according to claim 53 is contacted with the olefin.